Weekly Report for the week ending Apr. 5, 2001

*** CALORIMETER (N. Johnson)

4.1.5.1 CAL Management

Johnson supported the GLAST Science Working Group meeting in Baltimore.

The CAL team actively participated in the Gamma 2001 meeting in Baltimore during the week. A poster on the construction and performance of the BTEM calorimeter was presented.

Continued to anguish about the funding problem in France and the inability to initiate the PIN diode procurement. Creative solutions are being investigated.

CAL schedule and cost update being worked for next week's submission to IPO.

France
Discussion with CNES for the french budget. Work on financial and priority analysis of the Budget of 2001 . Writing a Proposal of Spatial Scientific Research for 2002, for the CNES by D.B. & all. (Bederede)

Planning done with the structure of the WBS proposition (Aker).

Discussion with Hamamatsu (France).

Documentation management in progress (Jean-Louis Ritou)

4.1.5.3 Performance Assurance

Supported The Office of System and Mission Assurance survey of LAT. No issues and findings were found except that some of the MAR requirements may be excessive.

Discussed GLAST LAT TKR Failure Modes and testing related issues.

4.1.5.4 CAL Design

Design of VM2 tooling: progress on engineering drawing, optimization, modifications.
Design of VM2 mechanical structure: modifications on cells close-out plates, optimization of PCBs attachment
Drafts for VM2 requirements and PEM specifications (O.F. & All)

-CAL GSE SW
Requirement for test at CERN in progress (CENBG)

4.1.5.5.2 CAL CsI Scintillation Crystal

Iterated CsI specification with Carlson. The expectation is to have the CsI contract signed next Monday.

France
Work on the air control of the Cosmic bench facilities in progress.

Work on the cosmic bench:
The new hodoscope is ready to test (P. Bourgeois, Y.Piret)
Mechanics in progress(Serge Herve).
New Data analysis for the new bench is in progress(F.X. Gentit)

4.1.5.5.3 PIN Photodiode

Discussion with Hamamatsu France- contractual questions- (D.B., Pierre Prat, Y.A.)
Assessment of the of flex specifications and cost. Assessment of soldering cost (P.Prat).
- PIN Bonding
Waiting for technical & financial proposal from CETIM. (Gilles, Claude Chapron, Didier Imbault).
Arrival of Taher Sharshar at LPNHE & work on the surface ruggedness of CsI (T.S &G.B.).
Transparency measurements of the masterbond glue after irradiation.
Setting up of the bench of luminescence measurement (Remy Chipaux).

4.1.5.6 CAL Pre Electronics Module

- Facilities
Facilities evaluation for LPNHE and College de France in progress.
- PEM integration:GSE
A general specifications document is in preparation for the PEM bench (Pierre Prat, Gilles)

==========

*** ANTICOINCIDENCE DETECTOR (Larsen)

ACD Management -
The first iteration of the ACD grassroots cost estimate has produced an unacceptable total. After scrubbing for possible double bookings, we will be conducting trade studies driven by cost reduction in a number of areas including channel redundancy,parts qualification at PCB level, distributed high voltage power supplies and electronic packaging. However, it appears unlikely that we can meet our proposed cost without some descopes.

Electrical -

Gunther Haller will arrive in mid-April to discuss the ACD electrical design.
A meeting was held with scientists on requirements flowdown and Dave Sheppard is developing the electrical specifications.
Satpal Singh wrote a draft document on the functions of the ACD Analog ASIC.
The action to determine the charge level (picocolombs/MIP) seen at the ASIC front end was established by Jonathan Ormes.

Mechanical -

The Detector Tile layout will be presented on 3/30 to the ACD Team.
Structural analyses (FEM) of the Tile Shell Assembly and the Base Electronic assembly is being developed.
Scott Murphy is working on mechanical interfaces to the LAT at the Base Electronics Assembly.
PMT to optical fiber connectors are being designed.

Clear fiber to wave shifting fiber connection is being designed and the process to test and verify it is being developed.

Routing of fiber bundles of the lower tiles is being developed.
We are also developing the manufacturing process for Tile Detector Assemblies.

After discussing the Micrometeoroid shield with JSC expert on orbital debris

protection, a Statement of Work (SOW) has been written and will be sent to JSC to develope the protective design aspects. Thereafter, our thermal designer will design the thermal layers and coating.
We will need thermal emittance numbers from SLAC in May to properly develop the thermal properties of the shield.

==========